

## PRODUCT BRIEF - Infiniband 4xQDR, QSFP Active Optical Cable

*Ideal for high-density applications*



**QC-X04-A11701-xx00-0-01**

### Product Summary

The newly developed Quad Small Form-factor Pluggable (QSFP) Active Optical Cable (AOC) is a highly integrated 4-channel optical cable that provides increased port density and total system cost savings. The QSFP full-duplex optical cables offer 4 independent transmit and receive channels, each capable of 10 Gbps operation for an aggregate bandwidth of 40 Gbps over 100 meters of optical fiber.

The QSFP AOCs have been designed to meet the harshest external operating conditions including temperature, humidity and EMI interference using Reflex Photonics' next generation, LightABLE™ packaging technology. The cables offer very high functionality and feature integration, accessible via a two-wire serial interface.

***Please see Product Data Sheet for detailed specifications.***

### Key Benefits:

- Lowest profile hot Z-pluggable parallel transceiver (pluggable into QSFP cage through front panel of system equipment)
- Aggregate Bandwidth of 40 Gbps
- 4x Increased port density over SFP and XFP modules

### Specifications and Features:

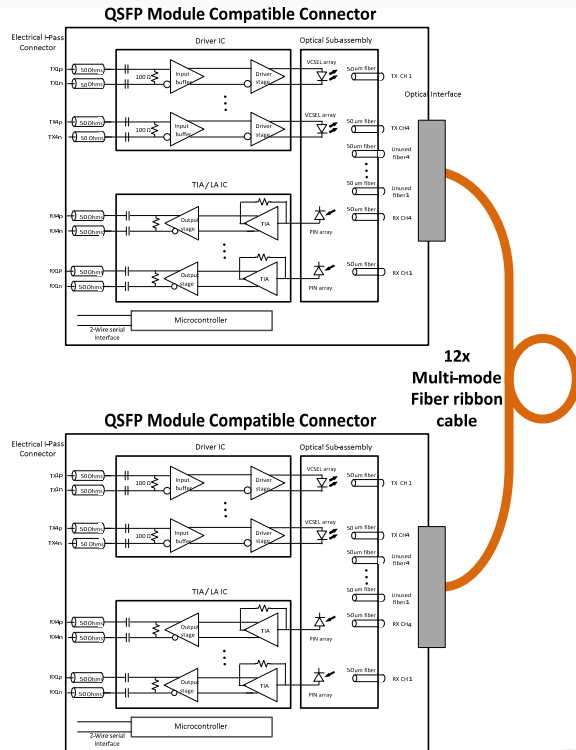
- 4 independent full-duplex channels
- Up to 10 Gbps per channel bandwidth
- Next generation, LightABLE™ VCSEL/PD array optical sub-assembly technology
- Single +3.3V power supply through IPASS connector
- CML/LVDS compatible electrical I/O
- High bandwidth 50µm multi-mode ribbon fiber
- Digital diagnostic capabilities
- QSFP MSA compliant

### Applications:

- High-performance computing, Datacom and Server data links for:
  - Board to board interconnects
  - Rack to rack interconnects
  - System to system interconnects



### Functional Diagram:



### Evaluation Kit:

QSFP Active Optical Cable evaluation kits designed for high-speed AOC testing are available. Each evaluation board is fitted with an IPASS® surface mount electrical connector as well as a cage where the cable can be inserted. 16 SMA connectors provide the connections for the 4+4 (8) differential electrical signals, which are AC coupled within the module. The QSFP AOC requires a single 3.3V power supply. A header is present for I2C communication with the management interface and for digital diagnostic access.

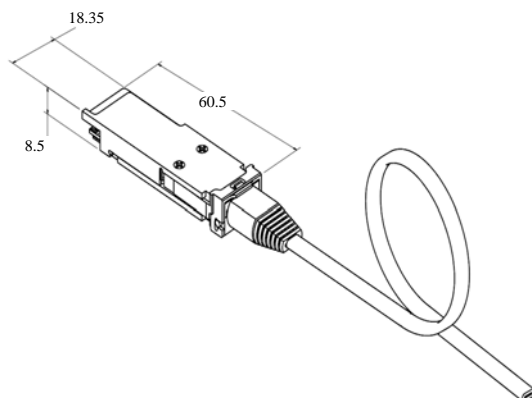
The evaluation kit includes one (1) evaluation printed circuit board and a user guide to facilitate the evaluation process. In-house application and design engineers are available to assist product evaluations and to support integration.

### Ordering information:

| Part Number             | Description  |
|-------------------------|--|
| QC-X04-A11701-1000-0-01 | Infiniband 4xQDR, QSFP Active Optical Cable. Cable length = 10 m.  |
| QC-X04-A11701-2500-0-01 | Infiniband 4xQDR, QSFP Active Optical Cable. Cable length = 25 m.  |
| QC-X04-A11701-5000-0-01 | Infiniband 4xQDR, QSFP Active Optical Cable. Cable length = 50 m.  |
| QC-X04-A11701-xx00-0-01 | Infiniband 4xQDR, QSFP Active Optical Cable. Cable length = xx m. Custom order, may be subject to minimum order.   |
| QS-K04-X01701           | Reflex 40G QSFP AOC Evaluation Kit – includes 1 evaluation board, 1 Power supply cable with clips and banana plug, 1 50Ohm to Ground Termination and a user guide. |

### Mechanical Considerations:

The QC-X04-A11701-xx00-0-01 QSFP AOC connectors meet the low profile requirements of Narrow Pitch Chassis.



For more information on this or other products: Contact sales at (650) 967-4416 or by email at [sales@reflexphotonics.com](mailto:sales@reflexphotonics.com)

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